Vidar
Digitizer Tools Version 1.1

Digitizer Diagnostics
Firmware Download
Passcode Editor

VIDAR Part Number 18210-001 Rev B
September 2009

© Copyright 2009 by VIDAR Systems Corporation. All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of VIDAR Systems Corporation.

VIDAR will provide support as per the terms and conditions set forth in the license agreement. Other terms and conditions may have been presented by VIDAR resellers. If these terms differ from those offered by VIDAR, it is the responsibility of the reseller, not VIDAR to fulfill these obligations. Further, support will only be given in the following situations:

- Installation and modifications are made by qualified personnel,
- The equipment is used in accordance with the instructions in this manual.
- No other software or hardware other than those sanctioned by VIDAR or distributed by VIDAR with Clinical Express are used on the Clinical Express workstation.

Contents

About this manual **4**

Digitizer Diagnostics **5**
Installing Digitizer Diagnostics 5
Using Digitizer Diagnostics 6

Firmware Download **11**
Installing Firmware Download 11
Using Firmware Download 12

Passcode Editor **15**
Installing Passcode Editor 15
Using Passcode Editor 16

Troubleshooting **20**

Appendix **26**

About this manual

This manual provides step-by-step instructions for installing and using these setup programs for Vidar film digitizers:

- **Digitizer Diagnostics** comprehensively tests an attached digitizer.
- **Firmware Download** displays an attached digitizer's current firmware versions and assists in updating firmware.
- **Passcode Editor** enables a new passcode to be assigned to a digitizer.

Digitizer Diagnostics

Digitizer Diagnostics performs comprehensive testing of an attached film digitizer. When testing is complete, you can send the results to Vidar Technical Support for analysis.

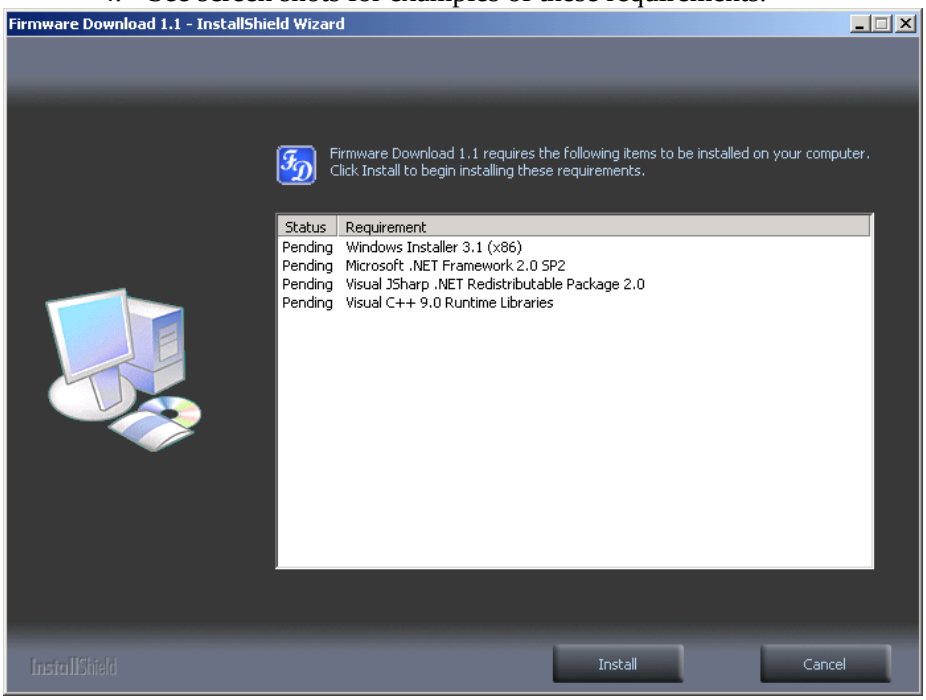
Installing Digitizer Diagnostics

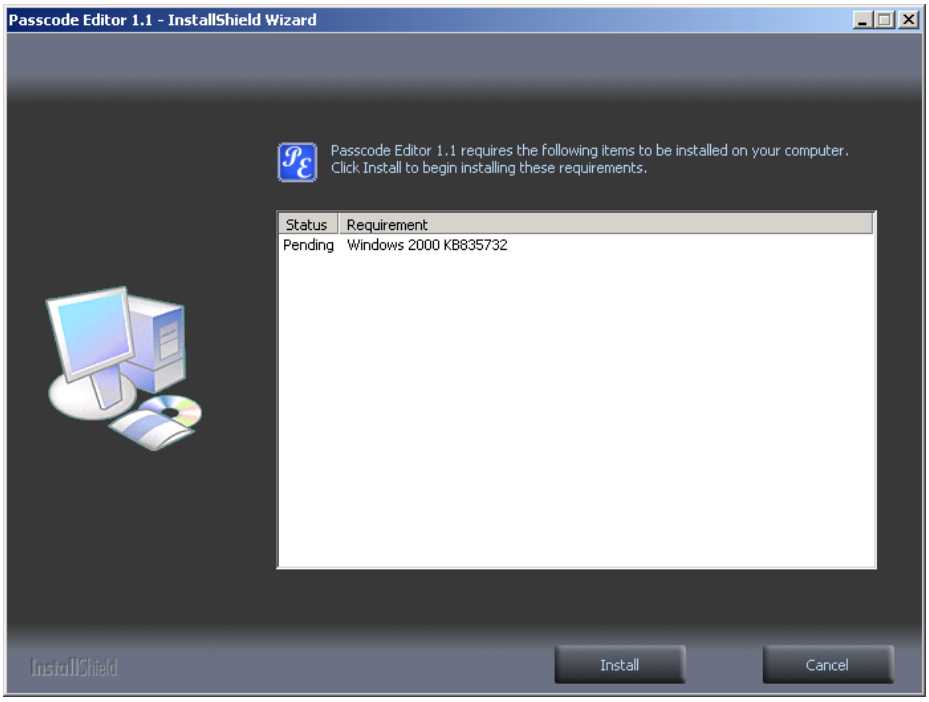
1. Download *DigitizerDiagnostic.exe* from the Vidar Web site. www.filmdigitizer.com . Browse to the Support page and then browse to the Troubleshooting page. Save the file in a convenient location on the local computer.

2. Double-click *DigitizerDiagnostic.exe* to launch the installation shield. This process can take up to 30 seconds before you see any indication that the installation has started.

3. Follow the instructions provided by the installation shield. It may be necessary to install other prerequisite programs as part of the installation. These will automatically be installed as part of the installation process.

4. See screen shots for examples of these requirements.





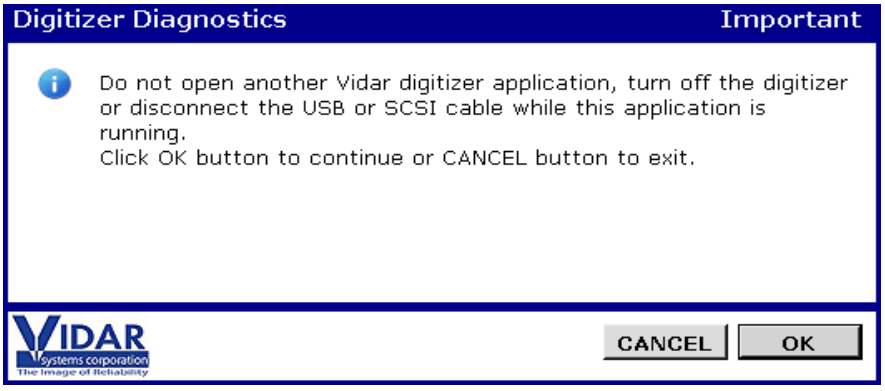
5. Follow the on screen instructions to complete the installation.

Using Digitizer Diagnostics

Note: The film digitizer must be powered on for at least 30 minutes before running diagnostic tests.

1. From the Desktop double click **> Digitizer Diagnostics**.

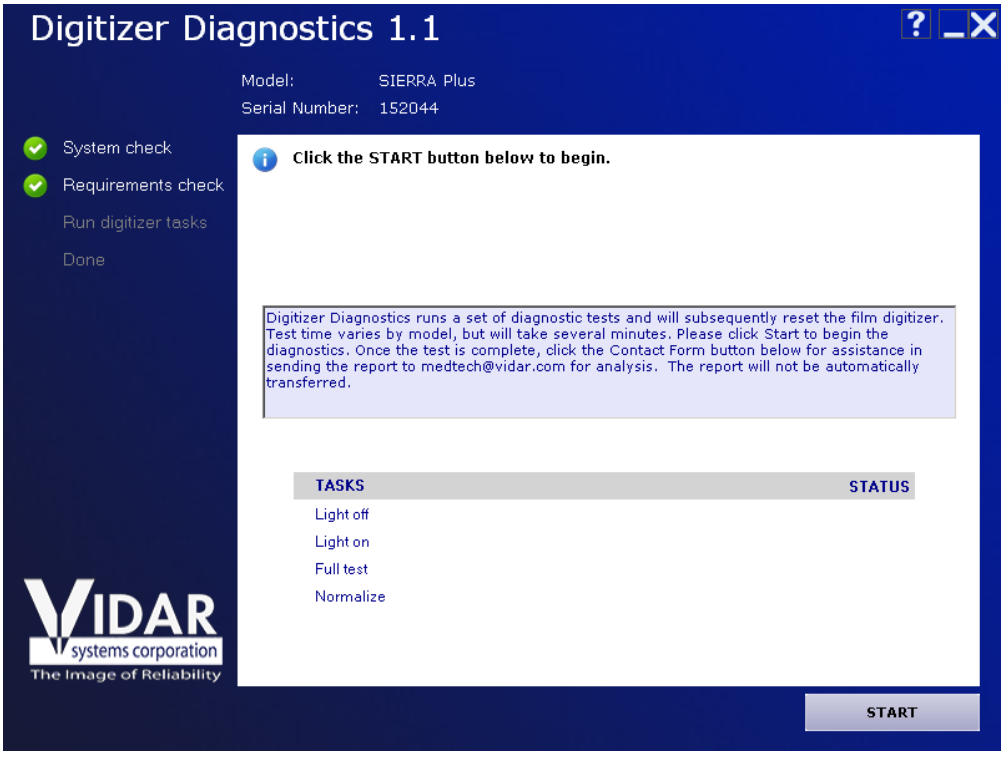
2. You will see the warning below. Click **OK** to continue.


Digitizer Diagnostics
Important
Do not open another Vidar digitizer application, turn off the digitizer or disconnect the USB or SCSI cable while this application is running.
Click OK button to continue or CANCEL button to exit.
VIDAR
Systems corporation
The Image of Reliability
CANCEL
OK

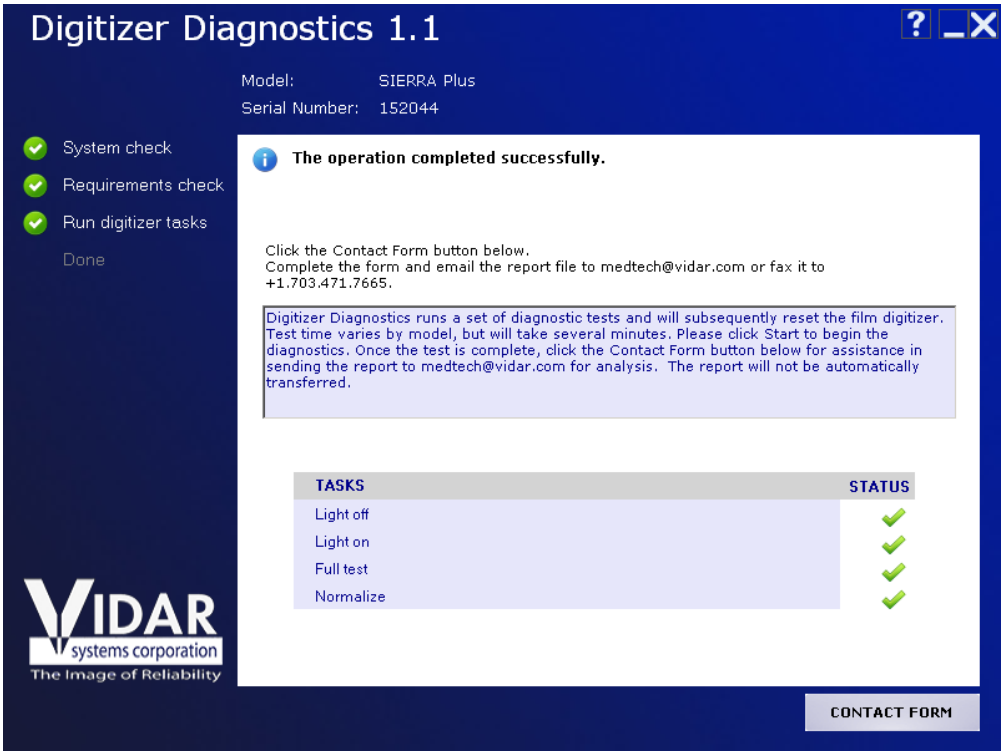
3. Wait while the application loads.

Note: The program will notify you if it cannot communicate with the digitizer. In this case, go to the "Troubleshooting" chapter.

5. Click the **Start** button in the lower right corner to start the diagnostics.

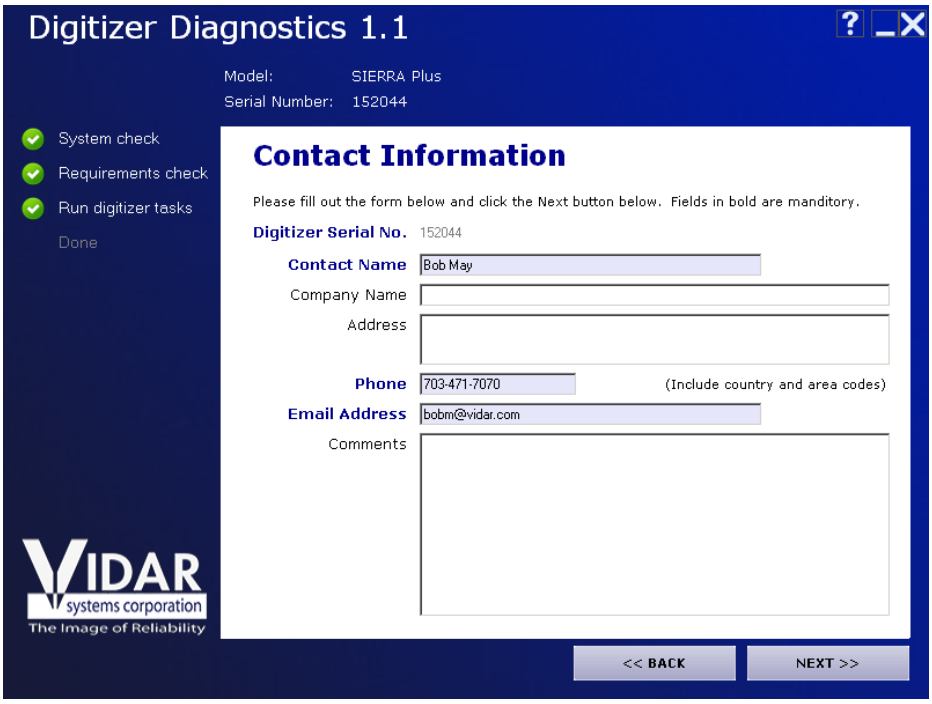

Digitizer Diagnostics 1.1
Model: SIERRA Plus
Serial Number: 152044
System check
Requirements check
Run digitizer tasks
Done
Click the START button below to begin.
Digitizer Diagnostics runs a set of diagnostic tests and will subsequently reset the film digitizer. Test time varies by model, but will take several minutes. Please click Start to begin the diagnostics. Once the test is complete, click the Contact Form button below for assistance in sending the report to medtech@vidar.com for analysis. The report will not be automatically transferred.
TASKS
STATUS
Light off
Light on
Full test
Normalize
VIDAR
systems corporation
The Image of Reliability
START

6. Wait while the diagnostic tests are performed.


Digitizer Diagnostics 1.1
Model: SIERRA Plus
Serial Number: 152044
System check
Requirements check
Run digitizer tasks
Done
The operation completed successfully.
Click the Contact Form button below.
Complete the form and email the report file to medtech@vidar.com or fax it to +1.703.471.7665.
Digitizer Diagnostics runs a set of diagnostic tests and will subsequently reset the film digitizer. Test time varies by model, but will take several minutes. Please click Start to begin the diagnostics. Once the test is complete, click the Contact Form button below for assistance in sending the report to medtech@vidar.com for analysis. The report will not be automatically transferred.
TASKS
STATUS
Light off
Light on
Full test
Normalize
VIDAR
systems corporation
The Image of Reliability
CONTACT FORM

7. When the tests are complete, click the **Contact Form** button in the lower right corner.

8. Fill in the fields in the **Contact** form, then click **Next** >>.



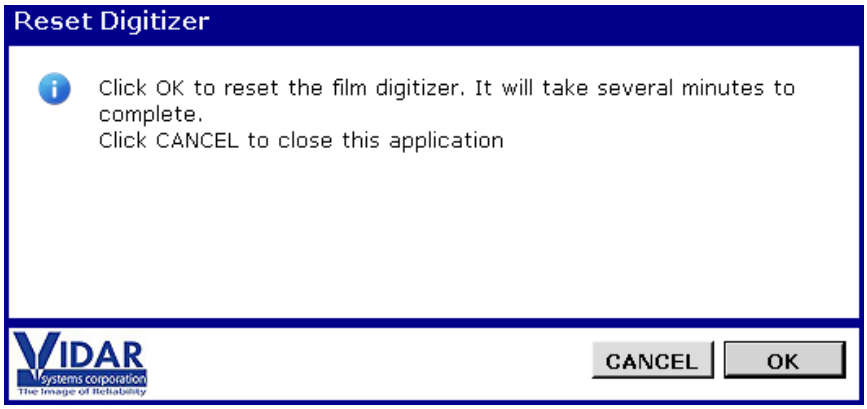
Digitizer Diagnostics generates a report of its findings. The report is located in the *My Documents\Film Digitizer\Report* folder. (A typical report is reproduced in the Appendix.)

9. Send the diagnostic report to Vidar using one of the following methods:

- If Digitizer Diagnostics detects e-mail capability on the computer, a new message window automatically appears with the diagnostic report attached. Send the message.
  or
- If Digitizer Diagnostics does not detect e-mail capability on the computer, you can copy the report file to a computer that has e-mail capability, then send the report as an attachment to medtech@vidar.com.
  or
- Print the report and fax it to 1.703.471.7665.

10. *To reset the digitizer:* Click **OK** in the dialog shown below. Digitizer Diagnostics will automatically close when the reset is complete. or
To exit the application without resetting the digitizer: Click **Cancel**.

Note: You must reset the film digitizer before attempting to digitize films.



Firmware Download

Firmware Download determines a film digitizers current firmware versions, and enables you to update firmware if newer versions are available.

NOTE: This should never run unless instructed to do so by a VIDAR authorized agent.

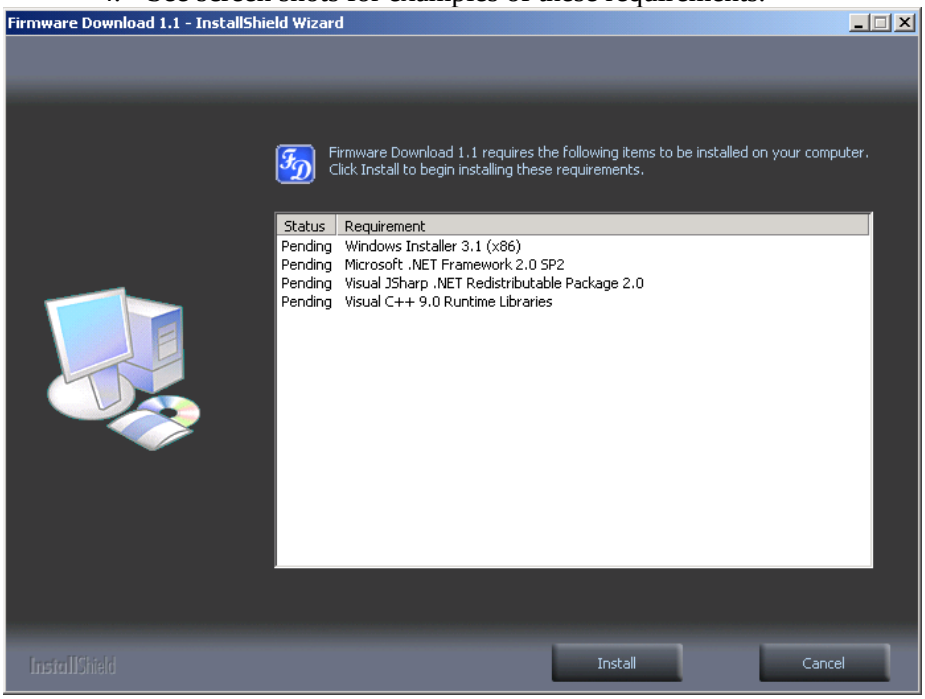
Installing Firmware Download

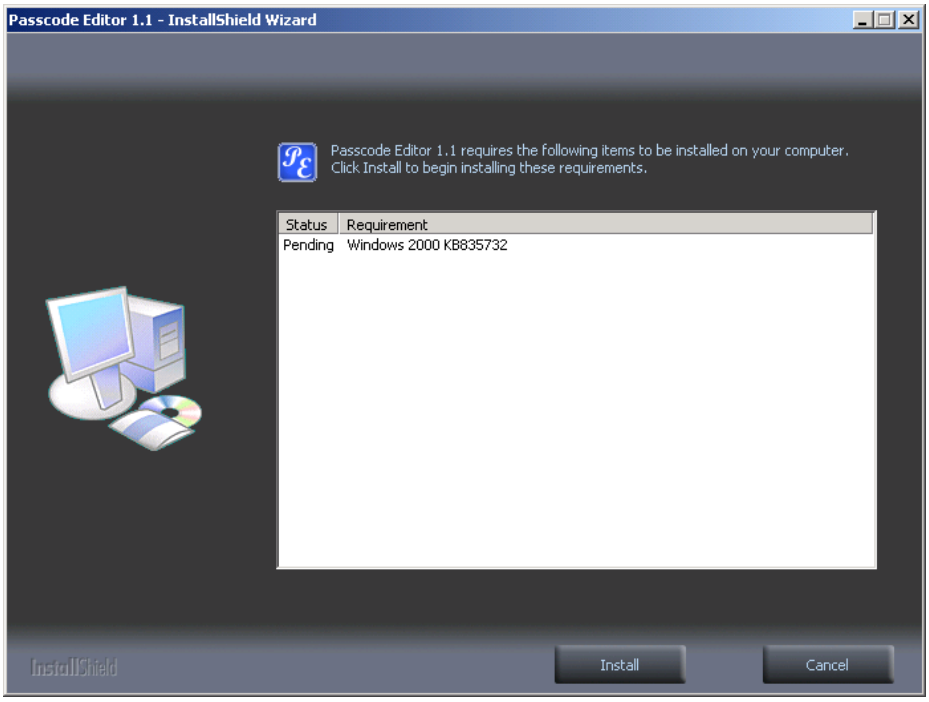
1. Download *FirmwareDownload.exe* from the Vidar FTP or PartnerNet sites. Save the file in a convenient location on the local computer.

2. Double-click *FirmwareDownload.exe* to launch the installation shield. This process can take up to 30 seconds before you see any indication that the installation has started.

3. Follow the instructions provided by the installation shield. It may be necessary to install other prerequisite programs as part of the installation. These will automatically be installed as part of the installation process.

4. See screen shots for examples of these requirements.



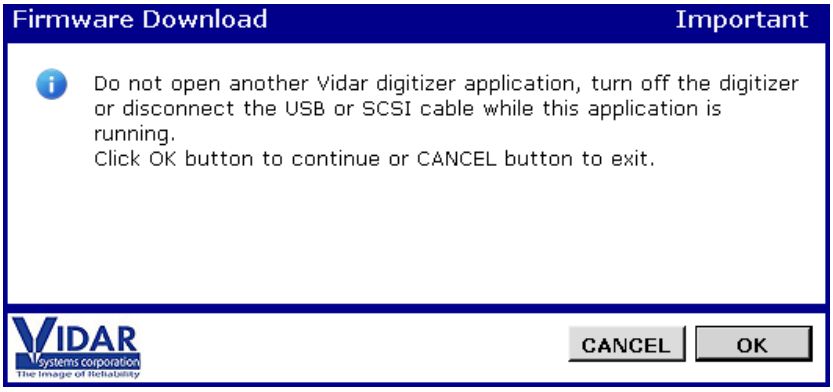


5. Follow the onscreen instructions to complete the installation.

Using Firmware Download

1. From the Desktop double click on **> Firmware Download**.

2. You will see the warning below. Click **OK** to continue.


Firmware Download
Important
Do not open another Vidar digitizer application, turn off the digitizer or disconnect the USB or SCSI cable while this application is running.
Click OK button to continue or CANCEL button to exit.
VIDAR
systems corporation
The Image of Reliability
CANCEL
OK

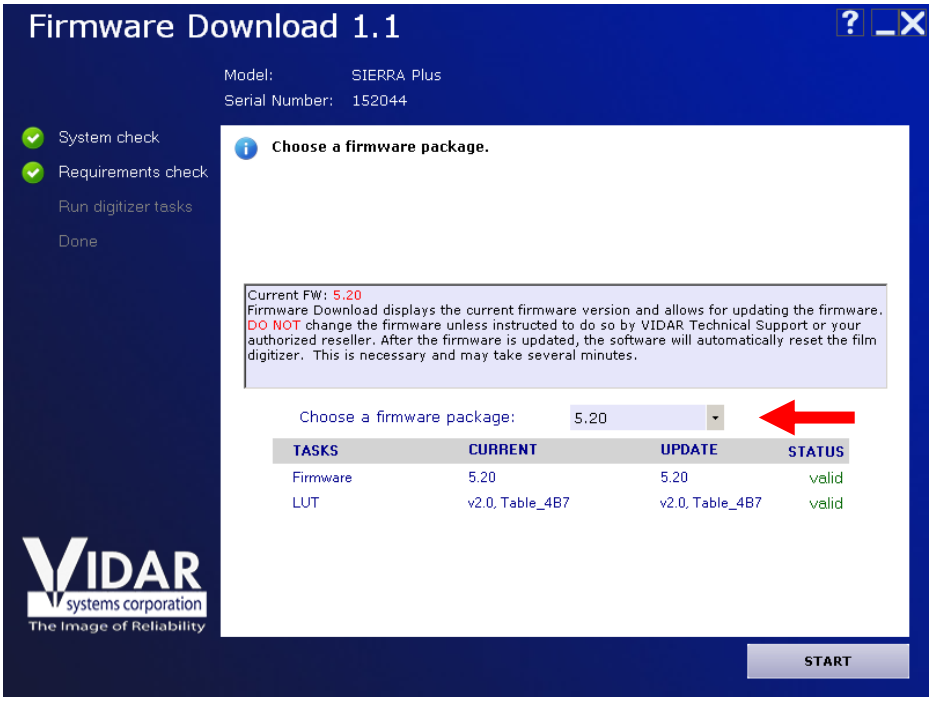
3. Wait while the application loads.

Note: The program will notify you if it cannot communicate with the digitizer. In this case, go to the "Troubleshooting" chapter.

4. Firmware Download first reads and displays the digitizer's firmware versions.

   - If the **Status** column shows "valid" for all firmware versions, then no further action is required. Exit Firmware Download.

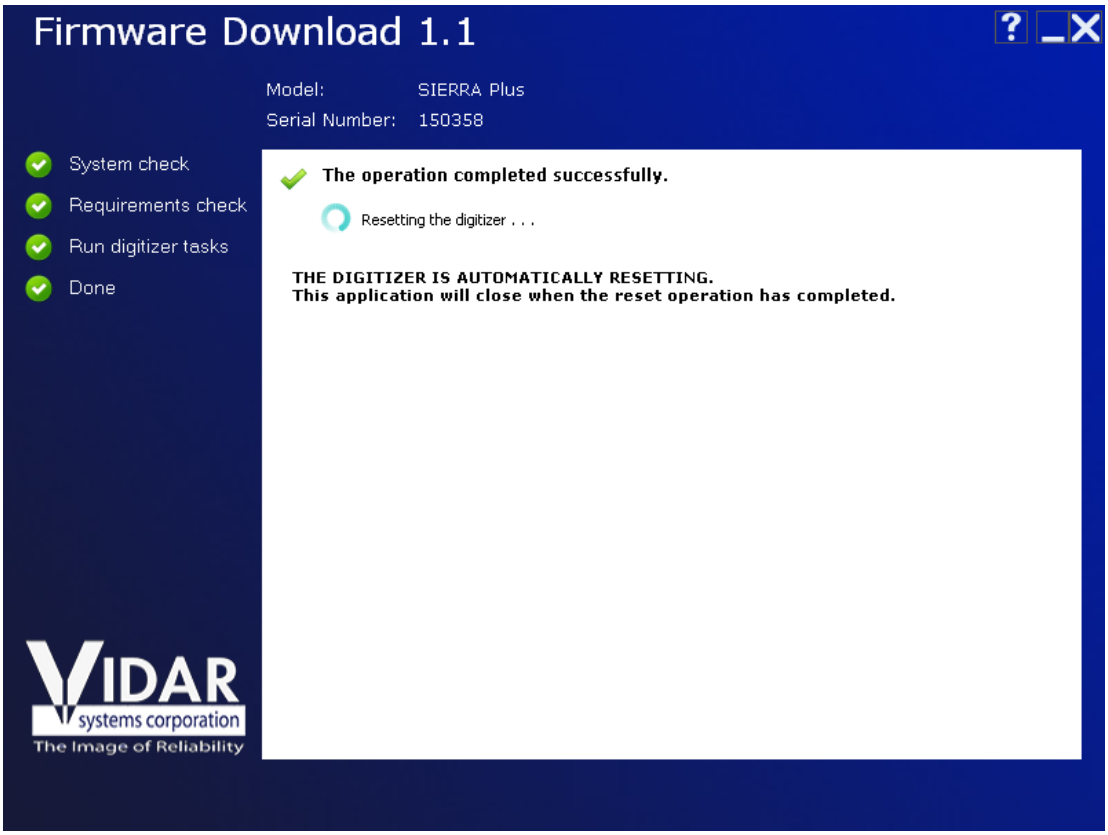
   - If firmware updates recommended:
     a. Open the drop-down list and select the desired firmware package to install.
     b. Click the **Start** button in the lower right corner.


Firmware Download 1.1
Model: SIERRA Plus
Serial Number: 152044
System check
Requirements check
Run digitizer tasks
Done
Choose a firmware package.
Current FW: 5.20
Firmware Download displays the current firmware version and allows for updating the firmware.
DO NOT change the firmware unless instructed to do so by VIDAR Technical Support or your authorized reseller. After the firmware is updated, the software will automatically reset the film digitizer. This is necessary and may take several minutes.
Choose a firmware package: 5.20
TASKS CURRENT UPDATE STATUS
Firmware 5.20 5.20 valid
LUT v2.0, Table_4B7 v2.0, Table_4B7 valid
VIDAR
systems corporation
The Image of Reliability
START

5. Wait while the firmware is updated.

CAUTION: Do not turn off the digitizer or computer during the firmware updating process.

6. When firmware updating is complete, the digitizer will be automatically reset. When resetting is complete, Firmware Download will automatically close.



Passcode Editor

Passcode Editor enables you to assign a new passcode to a film digitizer.

NOTE: This should never run unless instructed to do so by a VIDAR authorized agent.

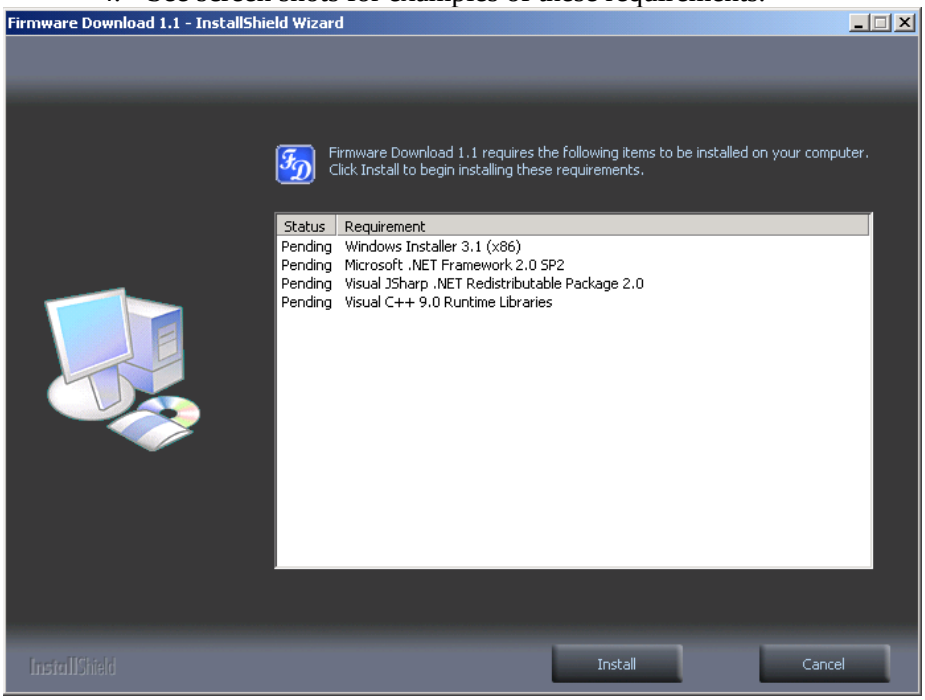
Installing Passcode Editor

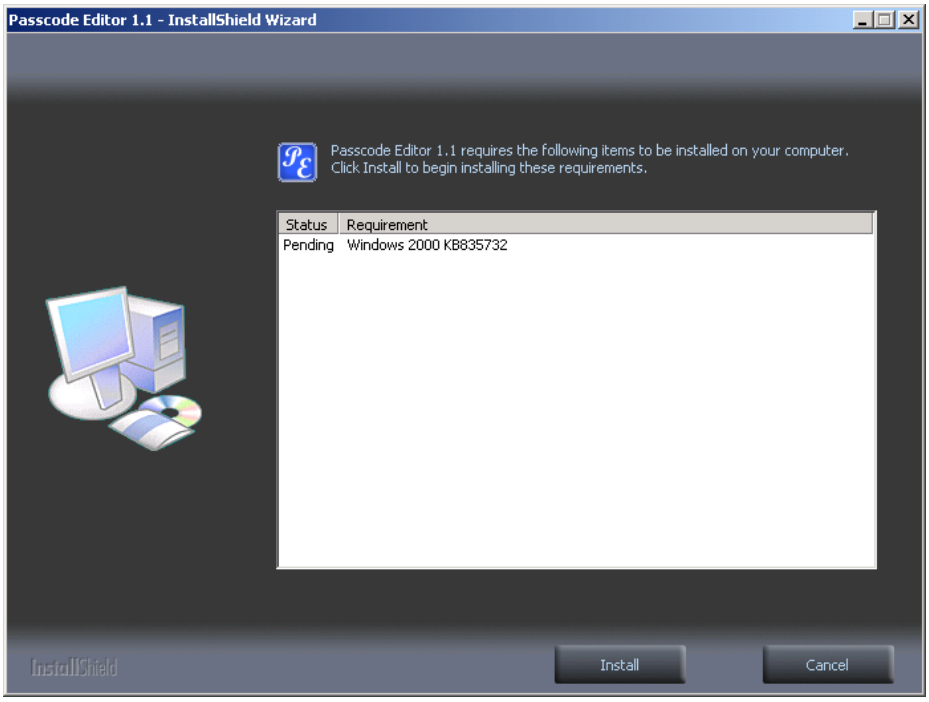
1. Download *PasscodeEditor.exe* from the Vidar FTP or PartnerNet sites. Save the file in a convenient location on the local computer.

2. Double-click *PasscodeEditor.exe* to launch the installation shield. This process can take up to 30 seconds before you see any indication that the installation has started.

3. Follow the instructions provided by the installation shield. It may be necessary to install other prerequisite programs as part of the installation. These will automatically be installed as part of the installation process.

4. See screen shots for examples of these requirements.

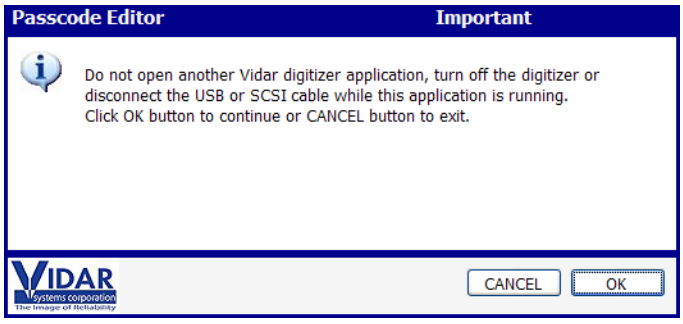




5. Follow the onscreen instructions to complete the installation

Using Passcode Editor

1. **Start > All Programs > Vidar > Passcode Editor**.
2. You will see the warning below. Click **OK** to continue.


Passcode Editor
Important
Do not open another Vidar digitizer application, turn off the digitizer or disconnect the USB or SCSI cable while this application is running.
Click OK button to continue or CANCEL button to exit.
VIDAR
CANCEL
OK

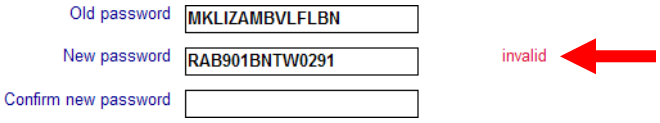
3. Wait while the application loads.

Note: The program will notify you if it cannot communicate with the digitizer. In this case, go to the "Troubleshooting" chapter.

4. In the **New password** field, enter the new password.

Passcode Editor 1.1
Model: SIERRA Plus
Serial Number: 152044
System check
Requirements check
Run digitizer tasks
Done
Enter a valid passcode.
Warning: Loading an incorrect passcode into the digitizer will damage the product with repair needed at VIDAR's headquarters. Only use this program if instructed to by VIDAR or your authorized reseller. This application is NOT capable of checking validity of the entire passcode. Double check the entry to avoid service issues. After the passcode is changed, the software will automatically reset the film digitizer. This is necessary and may take several minutes.
Old passcode
JOLZJYFFVLFLNM
New passcode
Confirm new passcode
VIDAR
systems corporation
The Image of Reliability

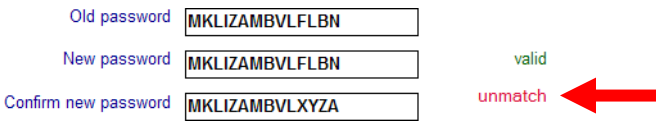
The word "invalid" will appear if you enter an unacceptable passcode.



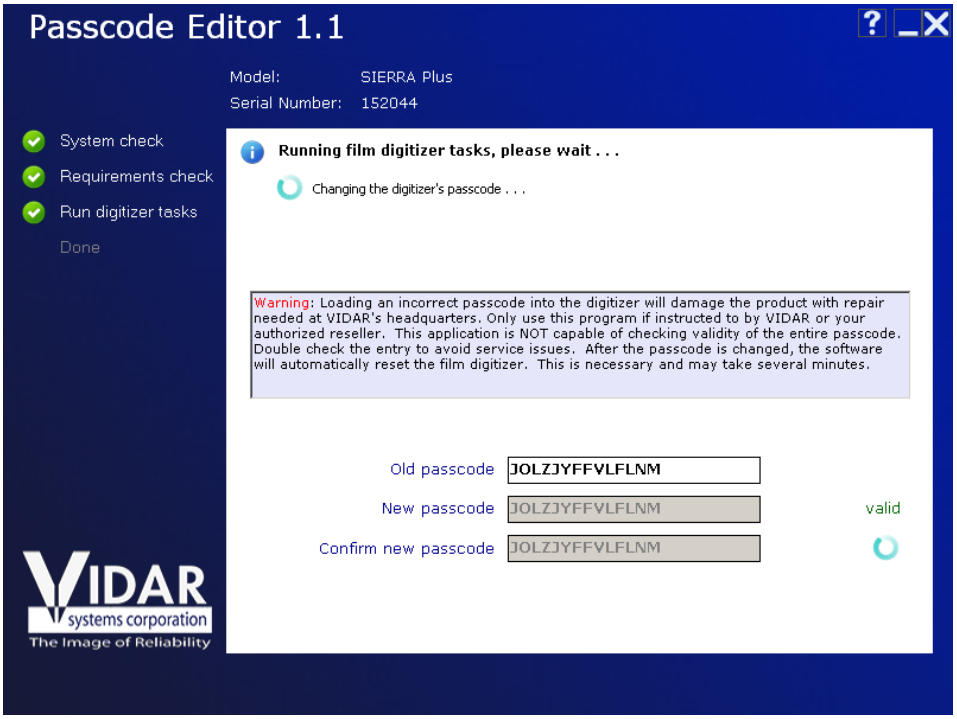
5. Enter the new passcode again in the **Confirm new password** field. If the contents of the **Confirm new password** field match the contents of the **New password** field, the word “matched” will appear.

Passcode Editor 1.1
Model: SIERRA Plus
Serial Number: 152044
System check
Requirements check
Run digitizer tasks
Done
Click the UPDATE button below to continue.
Warning: Loading an incorrect passcode into the digitizer will damage the product with repair needed at VIDAR's headquarters. Only use this program if instructed to by VIDAR or your authorized reseller. This application is NOT capable of checking validity of the entire passcode. Double check the entry to avoid service issues. After the passcode is changed, the software will automatically reset the film digitizer. This is necessary and may take several minutes.
Old passcode JOLZJYFFVLFLNM
New passcode JOLZJYFFVLFLNM valid
Confirm new passcode JOLZJYFFVLFLNM matched
VIDAR systems corporation
The Image of Reliability
UPDATE

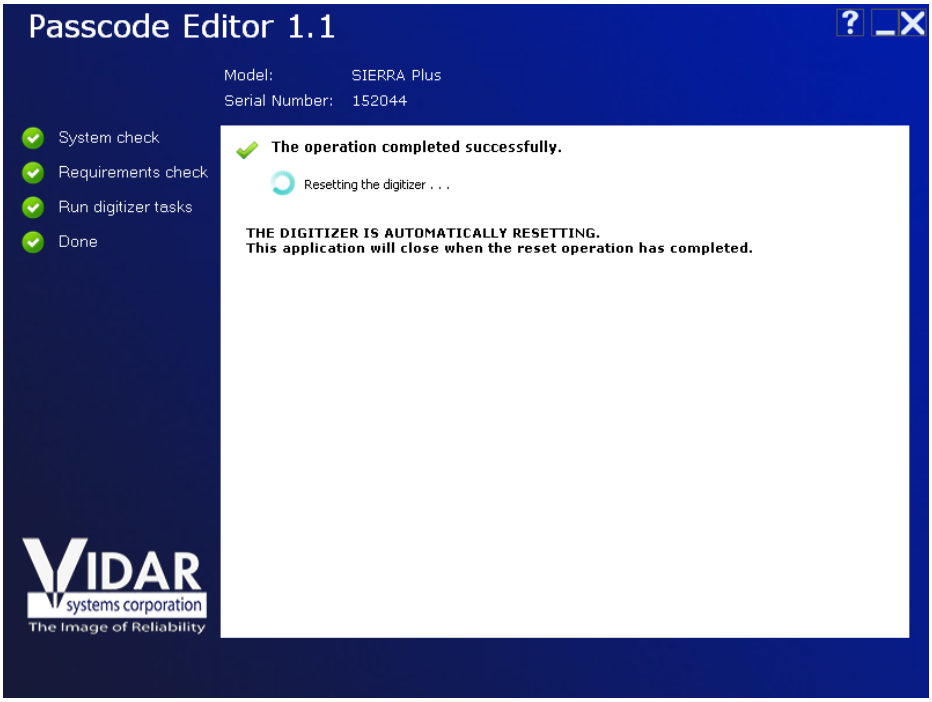
The word “unmatched” will appear if the contents of the **Confirm new password** field do not exactly match the contents of the **New password** field. If this happens, correct the passcode confirmation.



6. Click the **Update** button in the lower right corner. Wait while the passcode is updated.


Passcode Editor 1.1
Model: SIERRA Plus
Serial Number: 152044
System check
Requirements check
Run digitizer tasks
Done
Running film digitizer tasks, please wait . . .
Changing the digitizer's passcode . . .
Warning: Loading an incorrect passcode into the digitizer will damage the product with repair needed at VIDAR's headquarters. Only use this program if instructed to by VIDAR or your authorized reseller. This application is NOT capable of checking validity of the entire passcode. Double check the entry to avoid service issues. After the passcode is changed, the software will automatically reset the film digitizer. This is necessary and may take several minutes.
Old passcode
New passcode
valid
Confirm new passcode
VIDAR
systems corporation
The Image of Reliability

7. When passcode updating is complete, the digitizer will be automatically reset. When resetting is complete, Passcode Editor will automatically close.

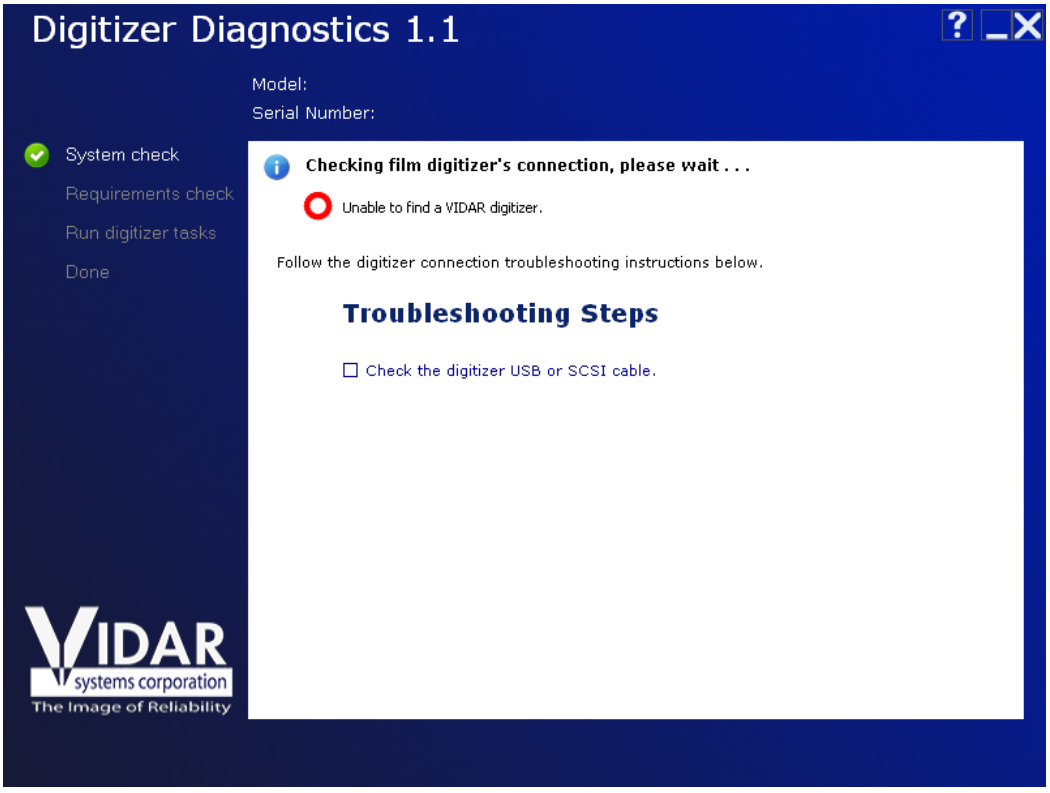


Troubleshooting

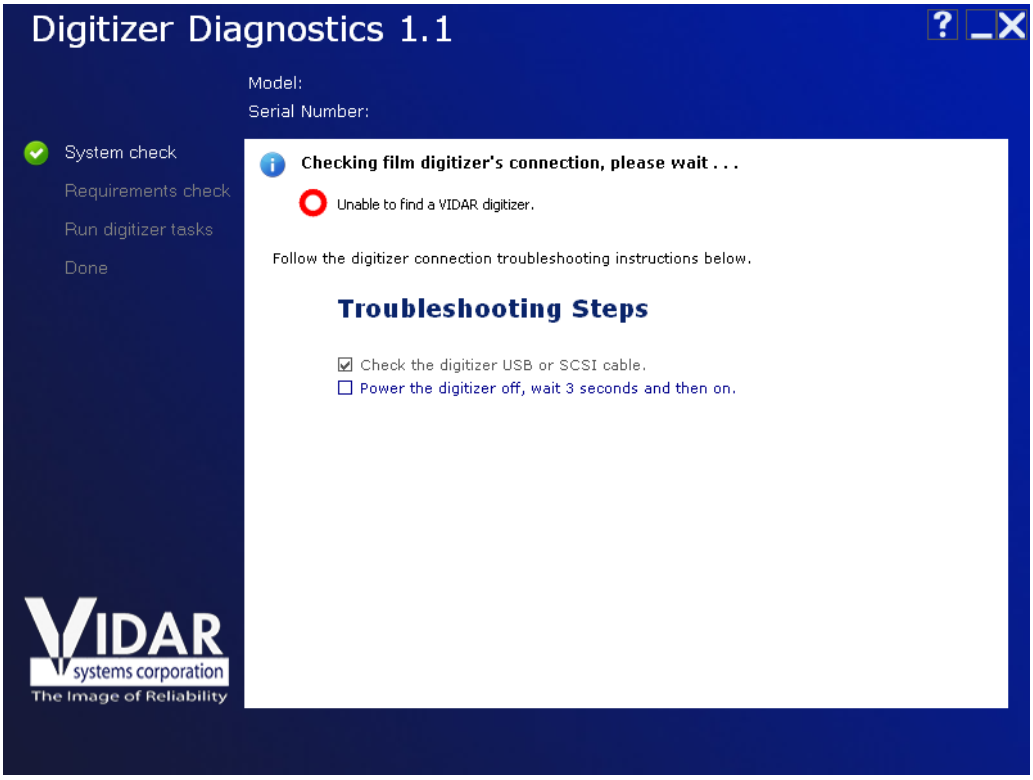
Digitizer Diagnostics, Firmware Download and Passcode Editor have built-in problem detection and troubleshooting help. After launching, each program first determines whether it can communicate with the digitizer. If communication is not possible, the program provides a checklist to help you identify and correct problems. As you complete each step, click its checkbox.

After each step, the program again attempts to communicate with the digitizer. If communication is established, you will be able to start normal program operations. If communication is not established, the next step in the troubleshooting process will be displayed.

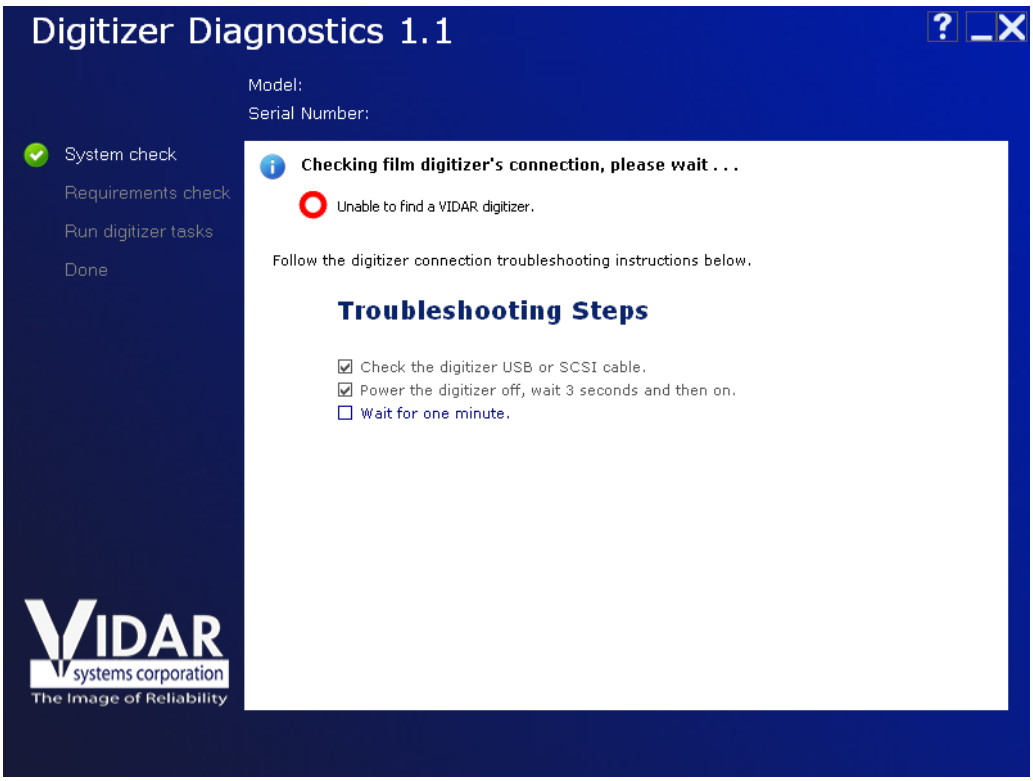
1. Make sure the digitizer is connected to the computer with the appropriate USB or SCSI cable.



2. Turn off the digitizer, then turn it on.



3. Wait three seconds.



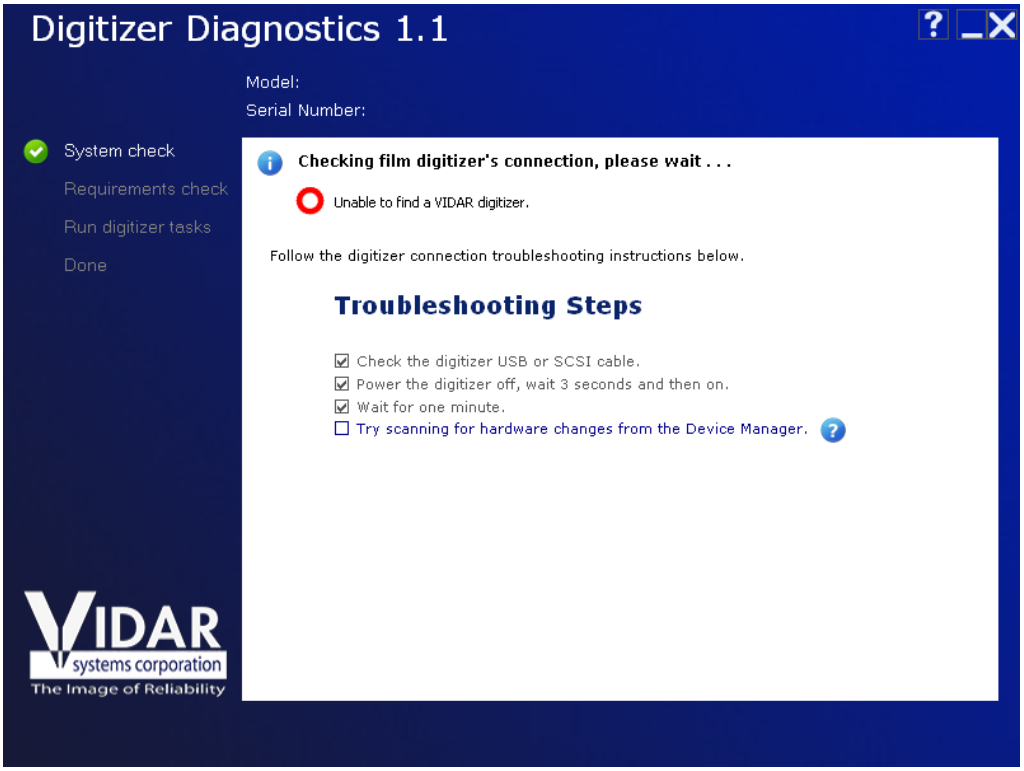
4. Scan for hardware changes:

   a. Right-click **My Computer**, then click **Manage** in the pop-up menu.

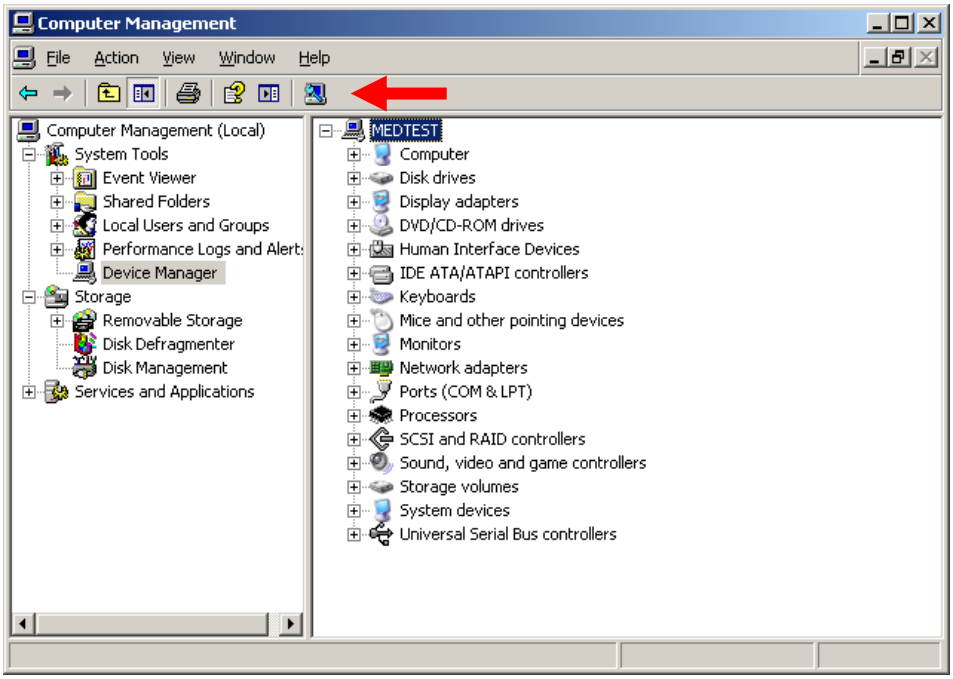
   b. In the **Computer Management** window's left tree, click **Device Manager**.

   c. In the right tree, click the computer's name (at the top of the tree).

   d. In the toolbar, click **Scan for hardware changes** button.


Digitizer Diagnostics 1.1
Model:
Serial Number:
System check
Requirements check
Run digitizer tasks
Done
Checking film digitizer's connection, please wait . . .
Unable to find a VIDAR digitizer.
Follow the digitizer connection troubleshooting instructions below.
Troubleshooting Steps
Check the digitizer USB or SCSI cable.
Power the digitizer off, wait 3 seconds and then on.
Wait for one minute.
Try scanning for hardware changes from the Device Manager.
VIDAR
systems corporation
The Image of Reliability

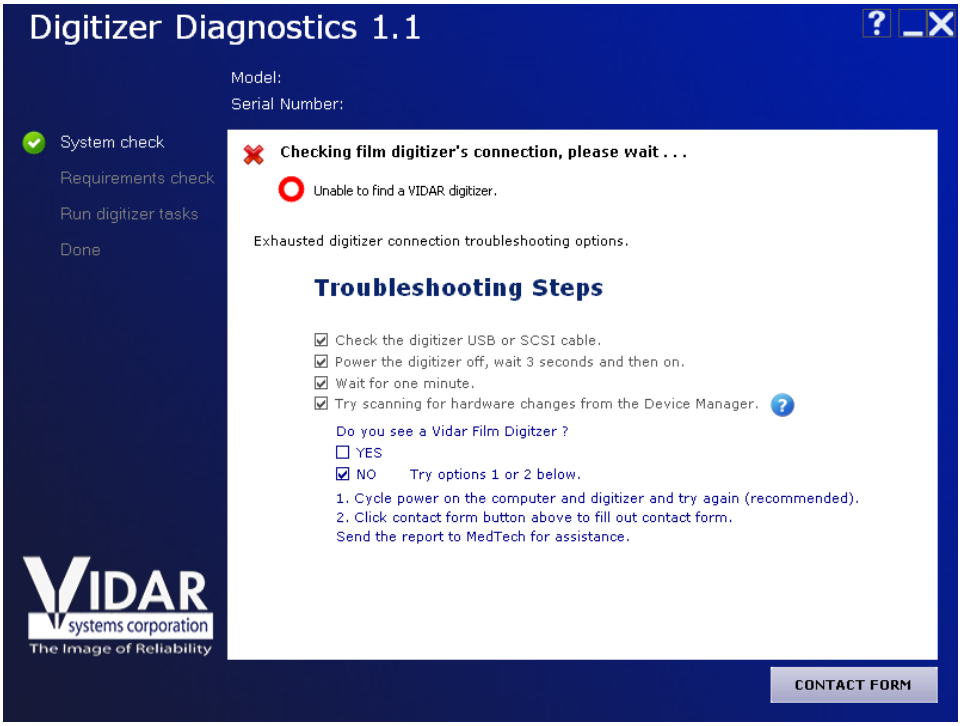
5. In the **Computer Management** window, look for **Vidar Film Digitizer**, then click the corresponding checkbox in Digitizer Diagnostics.

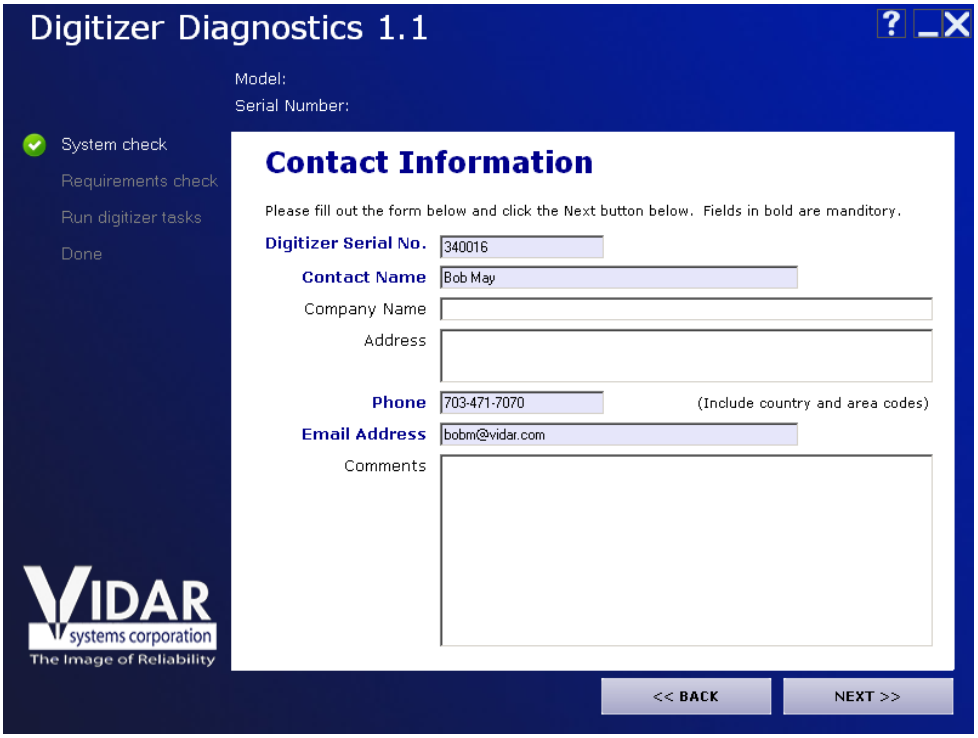


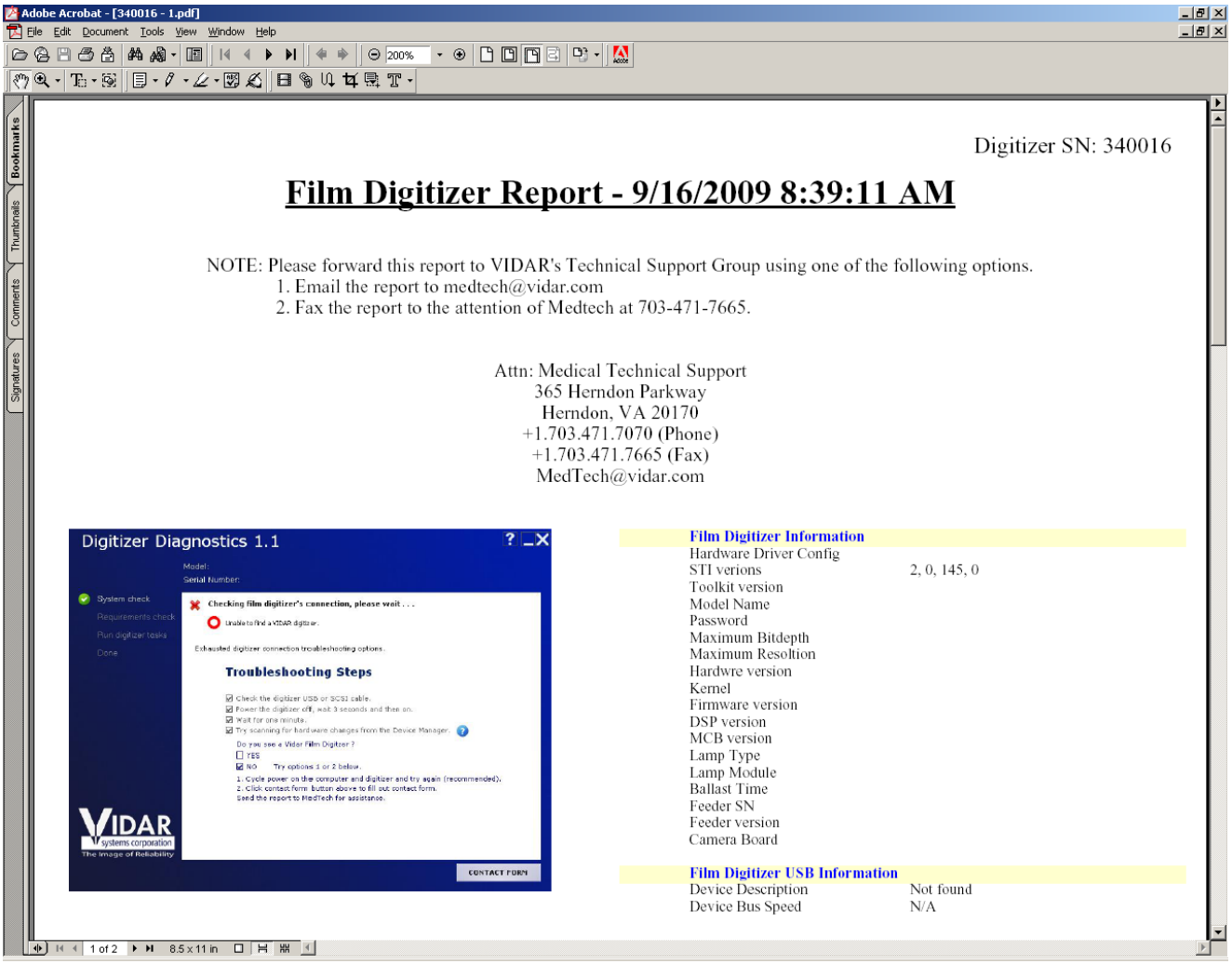
6. If you reach this point, no further troubleshooting suggestions are available. You can:

   - Restart both the computer and digitizer (recommended).

   - Click the **Contact form** button in the lower right corner to send a report to Vidar Technical Support. Continue at step 7 in the "Digitizer Diagnostics" chapter of this manual. See Screen Shots below


Digitizer Diagnostics 1.1
Model:
Serial Number:
System check
Requirements check
Run digitizer tasks
Done
Checking film digitizer's connection, please wait . . .
Unable to find a VIDAR digitizer.
Exhausted digitizer connection troubleshooting options.
Troubleshooting Steps
Check the digitizer USB or SCSI cable.
Power the digitizer off, wait 3 seconds and then on.
Wait for one minute.
Try scanning for hardware changes from the Device Manager.
Do you see a Vidar Film Digitzer ?
YES
NO Try options 1 or 2 below.
1. Cycle power on the computer and digitizer and try again (recommended).
2. Click contact form button above to fill out contact form.
Send the report to MedTech for assistance.
VIDAR
systems corporation
The Image of Reliability
CONTACT FORM


Digitizer Diagnostics 1.1
Model:
Serial Number:
System check
Requirements check
Run digitizer tasks
Done
Contact Information
Please fill out the form below and click the Next button below. Fields in bold are manditory.
Digitizer Serial No. 340016
Contact Name Bob May
Company Name
Address
Phone 703-471-7070 (Include country and area codes)
Email Address bobm@vidar.com
Comments
VIDAR
systems corporation
The Image of Reliability
<< BACK
NEXT >>


Adobe Acrobat - [340016 - 1.pdf]
File Edit Document Tools View Window Help
Bookmarks
Thumbnails
Comments
Signatures
Digitizer SN: 340016
Film Digitizer Report - 9/16/2009 8:39:11 AM
NOTE: Please forward this report to VIDAR's Technical Support Group using one of the following options.
1. Email the report to medtech@vidar.com
2. Fax the report to the attention of Medtech at 703-471-7665.
Attn: Medical Technical Support
365 Herndon Parkway
Herndon, VA 20170
+1.703.471.7070 (Phone)
+1.703.471.7665 (Fax)
MedTech@vidar.com
Digitizer Diagnostics 1.1
Model:
Serial Number:
System check
Requirements check
Run digitizer tasks
Done
Checking film digitizer's connection, please wait . . .
Unable to find a VIDAR digitizer.
Exhausted digitizer connection troubleshooting options.
Troubleshooting Steps
Check the digitizer USB or SCSI cable.
Power the digitizer off, wait 3 seconds and then on.
Wait for one minute.
Try scanning for hardware changes from the Device Manager.
Do you see a Vidar Film Digitizer ?
YES
NO Try options 1 or 2 below.
1. Cycle power on the computer and digitizer and try again (recommended).
2. Click contact form button above to fill out contact form.
Send the report to MedTech for assistance.
VIDAR
systems corporation
The Image of Reliability
CONTACT FORM
Film Digitizer Information
Hardware Driver Config
STI verions 2, 0, 145, 0
Toolkit version
Model Name
Password
Maximum Bitdepth
Maximum Resoltion
Hardwre version
Kernel
Firmware version
DSP version
MCB version
Lamp Type
Lamp Module
Ballast Time
Feeder SN
Feeder version
Camera Board
Film Digitizer USB Information
Device Description Not found
Device Bus Speed N/A
1 of 2
8.5 x 11 in

Appendix

This appendix reproduces a typical report generated by Digitizer Diagnostics.

Reports are initially created in the *My Documents\Film Digitizer\Report* folder. You can move or copy them to any other location.

Report names have the following syntax:

serial number – the number of times the report was run.pdf

For example, a report created for digitizer serial number 350282 would have this name:

350282 - 1.pdf

If additional reports are run the – number will change:

For example

350282 – 2.pdf
350282 – 3.pdr etc.

See example report below on the next few pages.

Digitizer SN: 350282

Film Digitizer Report - 9/11/2009 1:51:48 PM

NOTE: Please forward this report to VIDAR's Technical Support Group using one of the following options.
1. Email the report to medtech@vidar.com
2. Fax the report to the attention of Medtech at 703-471-7665.

Attn: Medical Technical Support
365 Herndon Parkway
Herndon, VA 20170
+1.703.471.7070 (Phone)
+1.703.471.7665 (Fax)
MedTech@vidar.com

Digitizer Diagnostics 1.1
Model: DiagnosticPRO Advantage (USA model)
Serial Number: 350282
System check
Requirements check
Film digitizer tasks
Done
The operation completed successfully.
Click the Contact Form button below.
Complete the form and email the report file to medtech@vidar.com or fax it to +1.703.471.7665.
Digitizer Diagnostics runs a set of diagnostic tests and will subsequently reset the film digitizer. Test time varied by model, but will take several minutes. Please click Start to begin the diagnostics. Once the test is complete, click the Contact Form button below for assistance in sending the report to medtech@vidar.com for analysis. The report will not be automatically transferred.
TASKS
STATUS
Digitizer info
Version info
Light off
Light on
Full test
Normalize
VIDAR
Systems corporation
The image of reliability
CONTACT FORM

Film Digitizer Information	
Hardware Driver Config	USB STI
STI versions	4, 0, 0, 0
Toolkit version	5.0.50.0
Model Name	DiagnosticPRO Advantage (USA model)
Password	AQMNNKCCVLFLNN
Maximum Bitdepth	12
Maximum Resoltion	570
Hardwre version	112
Kernel	9300
Firmware version	49.7
DSP version	6005
MCB version	0303
Lamp Type	LED
Lamp Module	None-CAD White LED
Ballast Time	Month: 10, Day: 18, Hour: 11
Feeder SN	192009
Feeder version	0415
Camera Board	N1

Film Digitizer USB Information	
Device Description	VIDAR Film Digitizer
Device Bus Speed	High Speed

Contact Information	
Contact name	Robert May
Company name	
Address	
Phone	703-471-7070x279
Email	bobm@vidar.com

Film Digitizer Messages	
Main task	Digitizer Diagnostics
Main message	The operation completed successfully.
Status	Completed
Window system Information	
Window Systems	Microsoft Vista Service Pack 1 (Build 6001)

COMMENTS:

SUMMARY:

DIGITIZER INFO :Digitizer Info Passed
VERSION INFO :Version Information Passed
LIGHT OFF : 96 66 44
LIGHT ON :65535 65535 65535
FULL TEST :Full Test Passed
NORMALIZE :Normalize Passed

Digitizer SN: 350282

Digitizer Info
0000000002 Feeder Type (Can not be set)
0000000011 Did not detect film in film feeder - Error String
0000000000 - Mode
0000000000 - No Vacuum
0000000000 - Lost Vacuum
0000000000 - Can't Home Cups
0000000002 - Slow Feed Error
0000010502 - Stage 1 Count
0000000000 - Stage 2 Count
0000000000 - Stage 3 Count
0000000000 - Vacuum Not Lost
192009 - Serial Number (Feeder)
0000013726 - Life Time Scan
0000013726 - Scan count1
0000013727 - Scan count2
0000000158 - Bad DSP Boots
000 - XML Support
0000000033 Ballast Type (Can not be set)
001 - Ballast (0, 1)
144 - Ballast Level (0-255)
This is a space filling diagnostic and should not be run.
This is a space filling diagnostic and should not be run.
This is a space filling diagnostic and should not be run.
0000458625 Ballast Time (Can not be set)
0000000033 Ballast Type (Can not be set)
0000000005 Delayed Start (Can not be set)
0000000002 Power Cycle (Can not be set)
0000000002 Power Cycle Failed (Can not be set)
0000000254 NVR Version (Can not be set)
0000000100 Bank 0 % (Can not be set)
0000000090 Bank 1 % (Can not be set)
0000000090 Bank 2 % (Can not be set)
0000000090 Bank 3 % (Can not be set)
0000034400 Strobe Count (Can not be set)
Errors since power up:
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
Life Time Errors:
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
0 Error: No error
Digitizer Info Passed

Version Info
0415 - FeederBoard
32773 - Video Path FPGA
0303 - Control Board
00006005 - DSP
0415 - FeederBoard
00254 - HW Version
00251 - NVR Version
002 - Switch Type
0033 - Lamp Module
0303 - Control Board
00253 - HW Version
00254 - NVR Version
00 - CPLD
00002 - DMA Cpld
N1 - Array
49.7 - Elan Version
Nov 1 2007 - Compile Date
12:46:24 - Compile Time
0701 - Compiler
00112 - HW Revision
Version Information Passed

Full Test
System Control Passed
System RAM Passed
System Low ROM Passed
System Hi ROM Passed
System ROM Passed
Non-Volatile RAM Passed
ADC LUT RAM Passed
Norm RAM Passed
Video LUT RAM Passed
Offset RAM Passed
Line Buffer RAM Passed
Output FIFO Passed
Memory Passed
Camera Selection (FPGA) None Passed
Camera Selection (FPGA) C1 Passed
Camera Selection (FPGA) C2 Passed
Camera Selection (FPGA) C3 Passed
Camera Selection (FPGA) C12 Passed
Camera Selection (FPGA) C13 Passed
Camera Selection (FPGA) C23 Passed
Camera Selection (FPGA) C123 Passed
Camera Selection (FPGA) C123 Passed
Camera Selection (FPGA) Passed
Camera Selection (LB) C1 Passed
Camera Selection (LB) C2 Passed
Camera Selection (LB) C3 Passed
Camera Selection (LB) Passed
Camera Selection Passed
Test Pattern C1 Passed
Test Pattern C2 Passed
Test Pattern C3 Passed
Test Pattern Passed
ADC LUT Test C1 Passed
ADC LUT Test C2 Passed
ADC LUT Test C3 Passed
ADC LUT Test Passed
Offset Path C1 Passed
Offset Path C2 Passed
Offset Path C3 Passed
Offset Path Passed
Video LUT C1 Passed
Video LUT C2 Passed
Video LUT C3 Passed
Video LUT Path Passed
Gain Path C1 Passed
Gain Path C2 Passed
Gain Path C3 Passed
Gain Path Passed
Normalize Path Passed
Clipper LE=4096 W= 3 Passed
Clipper LE=1024 W= 4 Passed
Clipper LE=2048 W= 6 Passed
Clipper LE= 512 W= 8 Passed
Clipper LE= 256 W= 16 Passed
Clipper LE= 128 W= 32 Passed
Clipper LE= 64 W= 64 Passed
Clipper LE= 32 W= 128 Passed
Clipper LE= 16 W= 256 Passed
Clipper LE= 8 W= 512 Passed
Clipper LE= 4 W=1024 Passed
Clipper LE= 2 W=2048 Passed
Clipper LE= 1 W=4096 Passed
Clipper LE= 0 W=8192 Passed
Clipper Passed
Data Path Passed
Byte Counter Passed
Scaler 570 Passed
Scaler 285 Passed
Scaler 142 Passed
Scaler 71 Passed
Scaler 300 Passed

Digitizer SN: 350282

Scaler 150 Passed
Scaler 75 Passed
Scaler Passed
DSP Communication Passed
DSP Memory Passed
DSP Tests Passed
Full Test Passed

Light On
0000065427 - Ballast Level at Check
0000065427 - Ballast Level at Check
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535
65535 65535 65535

Light Off
93 66 41
90 66 44
90 66 44
91 66 47
90 66 45
94 66 44
93 66 45
90 66 43
90 66 45
96 66 44

Normalize
Channel 1 Zero Check 0
Channel 2 Zero Check 0
Channel 3 Zero Check 0
Stabilize Array Offset (495) Avg: 0
Stabilize Array Offset (479) Avg: 0
Stabilize Array Offset (463) Avg: 0
Stabilize Array Offset (447) Avg: 0
Stabilize Array Offset (431) Avg: 0
Stabilize Array Offset (415) Avg: 0
Stabilize Array Offset (399) Avg: 0
Stabilize Array Offset (383) Avg: 0
Stabilize Array Offset (367) Avg: 0
Stabilize Array Offset (351) Avg: 0
Stabilize Array Offset (335) Avg: 0
Stabilize Array Offset (319) Avg: 0
Stabilize Array Offset (303) Avg: 0
Stabilize Array Offset (287) Avg: 0
Stabilize Array Offset (271) Avg: 0
Stabilize Array Offset (255) Avg: 57
Stabilize Array Offset (239) Avg: 427
Stabilize Array Offset (223) Avg: 830
Stabilize Array Offset (223) Avg: 1238
Stabilize Array Offset (223) Avg: 1238
Array Offset Ch 1 (255) Min: 0, Max: 0
Array Offset Ch 1 (495) Min: 392, Max: 477
Array Offset Ch 1 (479) Min: 0, Max: 0
Array Offset Ch 1 (463) Min: 0, Max: 0
Array Offset Ch 1 (447) Min: 0, Max: 0
Array Offset Ch 1 (431) Min: 0, Max: 0
Array Offset Ch 1 (415) Min: 0, Max: 0
Array Offset Ch 1 (399) Min: 0, Max: 0
Array Offset Ch 1 (383) Min: 0, Max: 0
Array Offset Ch 1 (367) Min: 0, Max: 0
Array Offset Ch 1 (351) Min: 0, Max: 0
Array Offset Ch 1 (335) Min: 0, Max: 0
Array Offset Ch 1 (319) Min: 0, Max: 0
Array Offset Ch 1 (303) Min: 0, Max: 0
Array Offset Ch 1 (287) Min: 0, Max: 0
Array Offset Ch 1 (271) Min: 0, Max: 0
Array Offset Ch 1 (270) Min: 24, Max: 108
Array Offset Ch 1 (269) Min: 44, Max: 125
Array Offset Ch 1 (268) Min: 71, Max: 155
Array Offset Ch 1 (267) Min: 95, Max: 176
Array Offset Ch 1 (266) Min: 121, Max: 205
Array Offset Ch 1 (266) Min: 144, Max: 228
Array Offset Ch 2 (255) Min: 0, Max: 0
Array Offset Ch 2 (495) Min: 332, Max: 423
Array Offset Ch 2 (479) Min: 0, Max: 0
Array Offset Ch 2 (463) Min: 0, Max: 0
Array Offset Ch 2 (447) Min: 0, Max: 0
Array Offset Ch 2 (431) Min: 0, Max: 0
Array Offset Ch 2 (415) Min: 0, Max: 0
Array Offset Ch 2 (399) Min: 0, Max: 0
Array Offset Ch 2 (383) Min: 0, Max: 0
Array Offset Ch 2 (367) Min: 0, Max: 0
Array Offset Ch 2 (351) Min: 0, Max: 0
Array Offset Ch 2 (335) Min: 0, Max: 0
Array Offset Ch 2 (319) Min: 0, Max: 0
Array Offset Ch 2 (303) Min: 0, Max: 0
Array Offset Ch 2 (287) Min: 0, Max: 0
Array Offset Ch 2 (271) Min: 0, Max: 0
Array Offset Ch 2 (270) Min: 0, Max: 54
Array Offset Ch 2 (269) Min: 0, Max: 70
Array Offset Ch 2 (268) Min: 9, Max: 102
Array Offset Ch 2 (267) Min: 29, Max: 124
Array Offset Ch 2 (266) Min: 61, Max: 155
Array Offset Ch 2 (265) Min: 83, Max: 175
Array Offset Ch 2 (264) Min: 109, Max: 202
Array Offset Ch 2 (263) Min: 125, Max: 233
Array Offset Ch 2 (263) Min: 163, Max: 257
Array Offset Ch 3 (255) Min: 0, Max: 0
Array Offset Ch 3 (495) Min: 519, Max: 605
Array Offset Ch 3 (479) Min: 0, Max: 0
Array Offset Ch 3 (463) Min: 0, Max: 0
Array Offset Ch 3 (447) Min: 0, Max: 0
Array Offset Ch 3 (431) Min: 0, Max: 0
Array Offset Ch 3 (415) Min: 0, Max: 0
Array Offset Ch 3 (399) Min: 0, Max: 0
Array Offset Ch 3 (383) Min: 0, Max: 0
Array Offset Ch 3 (367) Min: 0, Max: 0
Array Offset Ch 3 (351) Min: 0, Max: 0
Array Offset Ch 3 (335) Min: 0, Max: 0
Array Offset Ch 3 (319) Min: 0, Max: 0
Array Offset Ch 3 (303) Min: 0, Max: 0
Array Offset Ch 3 (287) Min: 0, Max: 0
Array Offset Ch 3 (271) Min: 0, Max: 0
Array Offset Ch 3 (286) Min: 139, Max: 221
Array Offset Ch 3 (285) Min: 0, Max: 0
Array Offset Ch 3 (284) Min: 0, Max: 0
Array Offset Ch 3 (283) Min: 0, Max: 0
Array Offset Ch 3 (282) Min: 0, Max: 0
Array Offset Ch 3 (281) Min: 0, Max: 0
Array Offset Ch 3 (280) Min: 0, Max: 0
Array Offset Ch 3 (279) Min: 0, Max: 0
Array Offset Ch 3 (278) Min: 0, Max: 13
Array Offset Ch 3 (277) Min: 0, Max: 40
Array Offset Ch 3 (276) Min: 0, Max: 68
Array Offset Ch 3 (275) Min: 4, Max: 86
Array Offset Ch 3 (274) Min: 32, Max: 116
Array Offset Ch 3 (273) Min: 54, Max: 140
Array Offset Ch 3 (272) Min: 85, Max: 167
Array Offset Ch 3 (271) Min: 104, Max: 189
Array Offset Ch 3 (271) Min: 142, Max: 222
Pixel Offset (Ch 1) (Target 1) Min: 177, Avg: 181, Max: 213
Pixel Offset (Ch 2) (Target 1) Min: 192, Avg: 196, Max: 241
Pixel Offset (Ch 3) (Target 1) Min: 172, Avg: 176, Max: 203
Elapsed Time 53.790
Pixel Offset Check (Ch 1) Min: 2, Avg: 3, Max: 5
Pixel Offset Check (Ch 2) Min: 2, Avg: 3, Max: 6
Pixel Offset Check (Ch 3) Min: 2, Avg: 3, Max: 5
Elapsed Time 58.260
Channel 1 Ones Check 65535
Channel 2 Ones Check 65535
Channel 3 Ones Check 65535
Ballast Find High Channel 1 65359
Ballast Find High Channel 2 65344
Ballast Find High Channel 3 65364
Channel Selected 3
Elapsed Time 62.960
Ballast Adjust (230) Min: 55835, Max: 65364
Video LUT Factor 00001.0000
Elapsed Time 63.175
Ballast Adjust (229) Ch 1 Min: 63159, Max: 65359
Ballast Adjust (228) Ch 1 Min: 62814, Max: 65359
Ballast Adjust (227) Ch 1 Min: 62627, Max: 65359
Ballast Adjust (226) Ch 1 Min: 62214, Max: 65359
Ballast Adjust (225) Ch 1 Min: 62112, Max: 65359
Ballast Adjust (224) Ch 1 Min: 61609, Max: 65359
Ballast Adjust (223) Ch 1 Min: 61539, Max: 65359
Ballast Adjust (222) Ch 1 Min: 61289, Max: 65359
Ballast Adjust (221) Ch 1 Min: 60945, Max: 65359
Ballast Adjust (220) Ch 1 Min: 60835, Max: 65359

Ballast Adjust (219) Ch 1 Min: 60493, Max: 65359
Ballast Adjust (218) Ch 1 Min: 60201, Max: 65359
Ballast Adjust (217) Ch 1 Min: 60038, Max: 65359
Ballast Adjust (216) Ch 1 Min: 59626, Max: 65359
Ballast Adjust (215) Ch 1 Min: 59415, Max: 65359
Ballast Adjust (214) Ch 1 Min: 59136, Max: 65359
Ballast Adjust (213) Ch 1 Min: 58983, Max: 65359
Ballast Adjust (212) Ch 1 Min: 58675, Max: 65359
Ballast Adjust (211) Ch 1 Min: 58237, Max: 65359
Ballast Adjust (210) Ch 1 Min: 58134, Max: 65359
Ballast Adjust (209) Ch 1 Min: 57797, Max: 65359
Ballast Adjust (208) Ch 1 Min: 57551, Max: 65359
Ballast Adjust (207) Ch 1 Min: 57346, Max: 65359
Ballast Adjust (206) Ch 1 Min: 56903, Max: 65359
Ballast Adjust (205) Ch 1 Min: 56770, Max: 65359
Ballast Adjust (204) Ch 1 Min: 56545, Max: 65359
Ballast Adjust (203) Ch 1 Min: 56303, Max: 65359
Ballast Adjust (202) Ch 1 Min: 55963, Max: 65359
Ballast Adjust (201) Ch 1 Min: 55690, Max: 65359
Ballast Adjust (200) Ch 1 Min: 55447, Max: 65359
Ballast Adjust (199) Ch 1 Min: 55189, Max: 65359
Ballast Adjust (198) Ch 1 Min: 54978, Max: 65359
Ballast Adjust (197) Ch 1 Min: 54601, Max: 65359
Ballast Adjust (196) Ch 1 Min: 54474, Max: 65359
Ballast Adjust (195) Ch 1 Min: 54119, Max: 65359
Ballast Adjust (194) Ch 1 Min: 53920, Max: 65359
Ballast Adjust (193) Ch 1 Min: 53427, Max: 65359
Ballast Adjust (192) Ch 1 Min: 53374, Max: 65359
Ballast Adjust (191) Ch 1 Min: 53084, Max: 65359
Ballast Adjust (190) Ch 1 Min: 52837, Max: 65359
Ballast Adjust (189) Ch 1 Min: 52418, Max: 65359
Ballast Adjust (188) Ch 1 Min: 52280, Max: 65359
Ballast Adjust (187) Ch 1 Min: 51982, Max: 65359
Ballast Adjust (186) Ch 1 Min: 51788, Max: 65359
Ballast Adjust (185) Ch 1 Min: 51367, Max: 65359
Ballast Adjust (184) Ch 1 Min: 51265, Max: 65359
Ballast Adjust (183) Ch 1 Min: 50957, Max: 65359
Ballast Adjust (182) Ch 1 Min: 50584, Max: 65359
Ballast Adjust (181) Ch 1 Min: 50292, Max: 65359
Ballast Adjust (180) Ch 1 Min: 50201, Max: 65359
Ballast Adjust (179) Ch 1 Min: 49875, Max: 65359
Ballast Adjust (178) Ch 1 Min: 49641, Max: 65359
Ballast Adjust (177) Ch 1 Min: 49247, Max: 65359
Ballast Adjust (176) Ch 1 Min: 48965, Max: 65359
Ballast Adjust (175) Ch 1 Min: 48847, Max: 65359
Ballast Adjust (174) Ch 1 Min: 48553, Max: 65359
Ballast Adjust (173) Ch 1 Min: 48225, Max: 65359
Ballast Adjust (172) Ch 1 Min: 48055, Max: 65359
Ballast Adjust (171) Ch 1 Min: 47681, Max: 65359
Ballast Adjust (170) Ch 1 Min: 47463, Max: 65359
Ballast Adjust (169) Ch 1 Min: 47135, Max: 65359
Ballast Adjust (168) Ch 1 Min: 46856, Max: 65359
Ballast Adjust (167) Ch 1 Min: 46557, Max: 65359
Ballast Adjust (166) Ch 1 Min: 46306, Max: 65359
Ballast Adjust (165) Ch 1 Min: 45985, Max: 65359
Ballast Adjust (164) Ch 1 Min: 45736, Max: 65359
Ballast Adjust (163) Ch 1 Min: 45475, Max: 65359
Ballast Adjust (162) Ch 1 Min: 45241, Max: 65359
Ballast Adjust (161) Ch 1 Min: 44987, Max: 65359
Ballast Adjust (160) Ch 1 Min: 44722, Max: 65359
Ballast Adjust (159) Ch 1 Min: 44456, Max: 65359
Ballast Adjust (158) Ch 1 Min: 44196, Max: 65359
Ballast Adjust (157) Ch 1 Min: 43815, Max: 65358
Ballast Adjust (156) Ch 1 Min: 43605, Max: 65358
Ballast Adjust (155) Ch 1 Min: 43291, Max: 65357
Ballast Adjust (154) Ch 1 Min: 42937, Max: 65357
Ballast Adjust (153) Ch 1 Min: 42758, Max: 65088
Ballast Adjust (152) Ch 1 Min: 42425, Max: 64679
Ballast Adjust (151) Ch 1 Min: 42305, Max: 64487
Ballast Adjust (150) Ch 1 Min: 41921, Max: 63880
Ballast Adjust (149) Ch 1 Min: 41667, Max: 63501
Ballast Adjust (148) Ch 1 Min: 41465, Max: 63125
Ballast Adjust (147) Ch 1 Min: 41144, Max: 62601
Ballast Adjust (146) Ch 1 Min: 40811, Max: 62231
Ballast Adjust (145) Ch 1 Min: 40496, Max: 61819
Ballast Adjust (145) Ch 1 Min: 40338, Max: 61459
Ballast Adjust (145) Ch 2 Min: 38095, Max: 60940
Ballast Adjust (145) Ch 3 Min: 35461, Max: 57779
Elapsed Time 81.890
Pixel limited Left 0 Right 1 on Ch 1
Pixel Gain (Ch 1) Min (Gain): 40413 (35006), Max (Gain): 61347 (697)
Pixel Gain (Limited) Min (Gain): 41975 (31265), Max (Gain): 61347 (697)
Pixel Gain (Ch 1) Low Count (Min): 0 (61955), High Count (Max): 0 (62040) of 7780
Pixel limited Left 0 Right 1 on Ch 2
Pixel Gain (Ch 2) Min (Gain): 38261 (40660), Max (Gain): 60756 (1342)

Pixel Gain (Limited) Min (Gain): 39356 (37705), Max (Gain): 60756 (1342)
Digitizer S/N 350282
Pixel Gain (Ch 2) Low Count (Min): 0 (61962), High Count (Max): 0 (62037) of 7780
Pixel limited Left 0 Right 1 on Ch 3
Pixel Gain (Ch 3) Min (Gain): 35597 (48609), Max (Gain): 57607 (4997)
Pixel Gain (Limited) Min (Gain): 37450 (42959), Max (Gain): 57607 (4997)
Pixel Gain (Ch 3) Low Count (Min): 0 (61958), High Count (Max): 0 (62046) of 7780
Elapsed Time 90.380
Second Offset Correction
Elapsed Time 90.575
Summary Information
Channel Offset 00266 00263 00271
Pixel Offset Min 00177 00192 00172
Pixel Offset Ave 00181 00196 00176
Pixel Offset Max 00213 00241 00203
Ballast Level 145
Video LUT Factor 00001.0000
Pixel Gain Min 61955 61962 61958
Pixel Gain Max 62040 62037 62046
Elapsed Time 90.595
Normalize Passed